Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) In a networking environment, a method for identifying network elements and related information, comprising:

providing a plurality of discovery plans, each having computer-useable device-specific instructions receivable by a network-element-discovery component, such that the computer-usable device-specific instructions are followed in order to perform discovery on at least one network element and specify queries to issue to the at least one network element, information to extract from results of the queries, and how to create and populate discovered objects with the results, wherein discovery includes extracting ~~to extract~~ information from ~~one or more network elements~~ the at least one network element based on the computer-usable device-specific instructions;

selecting a discovery plan from the plurality to interface with the at least one network element; and

using the selected discovery plan to extract descriptive data from the at least one network element.

2. (Original) The method of claim 1, wherein the network-element-discovery component includes a generic network-element interface (GeNEI).

3. (Canceled)

4. (Currently Amended) The method of claim [[3]] 1, wherein selecting a discovery plan comprises:

querying the at least one network element; and

receiving from the at least one network element information sufficient to determine from the plurality of discovery plans the selected discovery plan that will enable the GeNEI to interrogate the at least one network element.

5. (Currently Amended) The method of claim 4, wherein the at least one network element descriptive data includes data related to the physical characteristics of the at least one network element.

6. (Currently Amended) The method of claim 5, wherein data related to the physical characteristics of the at least one network element includes information related to one or more of: network cards, terminals, common controls, shelves, communications cards, circuits, ports, connections, virtual tributaries, shelves, communications capabilities, bandwidth characteristics, and identifying information.

7. (Original) One or more computer-readable media having computer-useable instructions embodied thereon for performing the method recited in claim 1.

8. (Currently Amended) A system for automatically populating a database with network-element information related to elements of a communications network, comprising:

one or more network-element-discovery components;

a plurality of discovery plans, each having computer-useable device-specific instructions receivable by the network-element-discovery component, such that the computer-usable device-specific instructions are followed in order to perform discovery on at least one network element and specify queries to issue to the at least one network element, information to extract from results of the queries, and how to create and populate discovered objects with the results, wherein discovery includes extracting ~~to extract~~ information from ~~one or more~~ the at least one network [[elements]] element based on the computer-useable device-specific instructions; and

an element-querying component to determine which of the plurality of discovery plans is configured to interface with the at least one network element, so that descriptive data can be extracted from the at least one network element.

9. (Currently Amended) The system of claim 8, further comprising a generic resolver for determining a communications protocol to be used to communicate with ~~one or more of~~ the at least one network [[elements]] element, whereby an applicable protocol-specific, device-agnostic interface can be selected to interrogate ~~one or more of~~ the at least one network [[elements]] element.

10. (Original) The system of claim 8, wherein each of the one or more network-element-discovery components is a protocol-specific, device-agnostic interface that uses one of the plurality of discovery plans to perform discovery functions on a communications network.

11. (Canceled)

12. (Currently Amended) The system of claim [[11]] 10, wherein information to be extracted from the one or more network elements includes identifying indicia and technical-specification data, where technical-specification data includes one or more of software versions, network addresses, identifiers, a listing of installed components, a listing of the location of installed components, a listing of the availability of services provisioned.

13. (Currently Amended) One or more computer-readable media having computer-useable instructions embodied thereon for performing a method of gathering and storing information about devices on a communications network, the method comprising:

identifying a protocol-specific interface module to communicate with a network device;

establishing a logical connection with the network device;

determining from the device a configuration file for interrogating the device, the configuration file having computer-useable device-specific instructions such that the computer-usable device-specific instructions are followed in order to perform discovery on the device and specify queries

to issue to the device, information to extract from results of the queries, and how to create and populate discovered objects with the results, wherein discovery includes extracting information from the device based on the computer-useable device-specific instructions; and

interrogating the device to receive device-attribute data related to the device, whereby the device-attribute data can be stored.

14. (Currently Amended) The media of claim 13, wherein determining a protocol-specific interface module to communicate with a network device includes at least one of the following methods:

issuing a command to the network device and receiving back an indication of a protocol to be used;

issuing a command to the network device and receiving back a response in the protocol to be used; and/~~or~~

successively issuing a plurality of commands in various protocols until a response is received from the network device indicating which of the plurality of protocols should be used.

15. (Original) The media of claim 14, wherein various protocols include a communications protocol for which a protocol-specific interface can be implemented.

16. (Currently Amended) The media of claim 15, wherein a communications protocol for which a protocol-specific interface can be implemented include one or more selections from the following: ~~SNMP~~ Simple Network Management Protocol, TL1, Telnet, a proprietary command-line-interface, ~~SSH~~ Secure Shell, CORBA, and Q3.

17. (Original) The media of claim 15, wherein determining a configuration file includes:

receiving identifying indicia from the device; and

identifying a configuration file consistent with the identifying indicia.

18. (Canceled)

19. (Currently Amended) The media of claim [[18]] 17, wherein using the configuration file to interrogate the device-attribute data includes information related to one or more of: network cards, terminals, common controls, communications cards, circuits, ports, connections, virtual tributaries, shelves, communications capabilities, bandwidth characteristics, and identifying information.

20. (Currently Amended) A system for discovering and analyzing network elements of a communications network, the system comprising:

a set of one of more discovery plans, ~~wherein the discovery plans include information describing how to query one or more of the network elements~~ each having computer-useable device-specific instructions such that the computer-usable device-specific instructions are followed in order to perform discovery on at least one network element and specify queries to issue to the at least one network element, information to extract from results of the queries, and how to create and populate discovered objects with the results, wherein discovery includes extracting information from

the at least one network element based on the computer-useable device-specific instructions;

a generic resolver that identifies a specific discovery plan from the set of one or more discovery plans that should be used to query ~~a specific~~ the at least one network element; and

a generic network-element-interface that receives the identified discovery plan to retrieve device-data from ~~a specific~~ the at least one network element.

21. (Currently Amended) A method of identifying capabilities of a network, comprising:

providing a set of discovery plans, each having computer-useable device-specific instructions such that the computer-usable device-specific instructions are followed in order to perform discovery on at least one network element and specify queries to issue to the at least one network element, information to extract from results of the queries, and how to create and populate discovered objects with the results, wherein discovery includes extracting information from the at least one network element based on the computer-useable device-specific instructions;

identifying an appropriate network-element-interface to use for performing discovery on ~~one or more network devices~~ the at least one network device;

identifying an appropriate discovery plan for the identified network-element-interface to use for performing discovery on ~~said one or more network devices~~ the at least one network device;

retrieving data related to ~~said one or more network devices~~ the at least one network device; and

automatically populating a database with the retrieved data.